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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,496	08/28/2003	Larry C. McNeff	7449.15US01	6962

7590 09/08/2005

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EXAMINER	
SAYALA, CHHAYA D	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/650,496	MCNEFF ET AL.	
	Examiner	Art Unit	
	C. SAYALA	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-11 and 13-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-11 and 13-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 4-11, 13-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Austin (US Patent 137743) in view of Chen (US Patent 5641530), Dalmasso et al. (US Patent 5460845) and HU 61443 and further in view of Hatfield (US Patent 5266487), Muller (US Patent 1927988) and Alla (Nahrung, vol. 41(6), pages 362-365, 1997).

Austin teaches spraying as a mist, grains that are used as feed with a disinfectant to remove fungus spores. The reference does not teach that the disinfectant is hydrogen peroxide or its amounts.

Chen teaches disinfecting food stuff using hydrogen peroxide. At col. 4, lines 4-5, Chen states that the "germicide effect of hydrogen peroxide has been well recognized". Concentrations are different, as are the foodstuffs being treated.

Dalmasso et al. teach a method decontaminating seeds, grains, etc. of molds, yeast and fungi by using hydrogen peroxide. (col. 1, lines 15-20 and lines 65-67). The patent teaches that the liquid hydrogen peroxide concentration is 25-70%. Although the patent teaches the use of H_2O_2 as a vapor, one of ordinary skill in the art at the time the invention was made, would reasonably expect that since a compound and its properties

are inseparable, the germicidal property of H_2O_2 would be the same, liquid or vapor. Furthermore, the prior art applied recognizes that liquid peroxide is a disinfectant for feedstuff with respect to fungus etc. It would have been obvious to the artisan that the applied references, as a whole, teach that hydrogen peroxide is disinfectant for feedstuff, grains, etc., that it was known to spray a mist of the disinfectant over feedstuff and the concentrations shown between 20-70% by '845 would depend on the amount of grain to be disinfected and the extent of contamination expected because of the quality and length of storage. Note that HU 61443 already establishes that it was known in the art that grain fodder contaminated with mold or microtoxins can be detoxified by hydrogen peroxide and the availability of such art and knowledge would have been available to the practitioner who is looking to preserve grains, even distiller's grains from mold and/or fungus.

The remaining references teach the concentration of hydrogen peroxide that has been used by prior art with respect to feedstuff ('487), seeds such as corn, wheat, rye, barley, etc. ('988) and cereal for fungi treatment (Alla). The concentrations are 0.1 to 10% (col. 3, lines 8-9 in '487), 0.5 to 2% (page 2, lines 4-5) and 3, 5 and 10% in Alla. Thus while it was known in the art that hydrogen peroxide is a disinfectant for foodstuffs (Chen, Dalmasso and the HU abstract as well as Alla), and it would have been obvious to spray as a mist such a disinfectant, based on it being a liquid (Austin), it would also have been obvious to one of ordinary skill in the art to use the concentrations shown by prior art as being useful for grains or seeds that are commonly used as livestock feed. Note that although Muller teaches treating seeds/grains for the purpose of sowing and

not for the purpose of feeding livestock, the objective is the same: preventing molds and fungi during storage (page 1, lines 6-10 and see instant specification).

Response to Arguments

Applicant's arguments with respect to claims 1, 4-11, 13-23 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments are based on the new limitations based on the concentrations of peroxide. The rejection now made renders such arguments moot.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA whose telephone number is 571-272-1405.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Sayala

C. SAYALA
Primary Examiner
Group 1700.